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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,134	04/09/2004	Seok-Gyun Woo	52322/DBP/Y35	2475
23363	7590	03/06/2006	EXAMINER	
CHRISTIE, PARKER & HALE, LLP			WON, BUMSUK	
PO BOX 7068			ART UNIT	
PASADENA, CA 91109-7068			PAPER NUMBER	
			2879	

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/822,134	<b>Applicant(s)</b> WOO ET AL.	
	<b>Examiner</b> Bumsuk Won	<b>Art Unit</b> 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-20 and 22-25 is/are rejected.
- 7) ☒ Claim(s) 9 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

The amendment filed on 12/19/2006 has been entered and overcomes the objections to the claims.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawanishi (US 6,977,467).

Regarding claim 1, Kawanishi discloses a plasma display panel (figure 1) comprising: a first and second substrates (352 and 351) spaced apart from each other at a distance and proceeding substantially parallel to each other, and the substrates having a display area and a non display area (paragraph 18); address electrodes (307) are formed on the first substrate and covered by a dielectric layer (314); main barrier ribs (315) are arranged between the substrates to form discharge cells (308); phosphor layer (311) formed within the discharge cells; discharge sustain electrodes (303-306) are formed on the second substrate and covered by a dielectric layer (312); and reinforcing barrier ribs (figures 9A, 11A, 15A and 17A) are arranged at the non display area while surrounding the display area, and connected to the main barrier ribs with an outer structure curved toward the outside of the substrates.

Regarding claims 2-3, Kawanishi discloses the reinforcing barrier ribs (figure 10) surround all four edges of the display area.

Regarding claim 4, Kawanishi discloses the thickness of the reinforcing barrier ribs (figure 15A, W4) is substantially the same as the thickness of the main barrier ribs (not referenced).

Regarding claim 5, Kawanishi discloses the reinforcing barrier ribs (figure 9A, bottom semicircle shaped ribs) have a width gradually reduced from the center thereof to both end portions thereof.

Regarding claim 6, Kawanishi discloses reinforcing barrier ribs are outlined with an arc (figures 9A, 11A, 15A and 17A).

Regarding claim 7, Kawanishi discloses reinforcing barrier ribs are outlined with a plurality of arcs (figures 9A, 11A, 15A and 17A).

Regarding claim 8, Kawanishi discloses the arc portions of the reinforcing barrier ribs are differentiated in the thickness thereof (figure 15A, the thicknesses of the arc portions are different).

Regarding claim 10, Kawanishi discloses the respective arc portions correspond to a discharge cell (figure 15A, the thinner inside arc).

Regarding claim 11, Kawanishi discloses the respective arc portion correspond to two or more discharge cells (figure 15A, the thicker outside arc).

Regarding claim 12, Kawanishi discloses a plasma display panel (figure 1) comprising: a first and second substrates (352 and 351) spaced apart from each other at a distance and proceeding substantially parallel to each other, and the substrates having a display area and a non

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display area (paragraph 18); address electrodes (307) are formed on the first substrate and covered by a dielectric layer (314); main barrier ribs (315) are arranged between the substrates to form discharge cells (308); phosphor layer (311) formed within the discharge cells; discharge sustain electrodes (303-306) are formed on the second substrate and covered by a dielectric layer (312); and dummy barrier ribs (figures 9A, 11A, 15A and 17A) are arranged at the non display area; wherein the dummy barrier ribs comprise main barrier ribs spaced apart from the end portions of the main barrier ribs at a distance while proceeding in a direction of the display area (figures 8, 10, 12, 13, 14, 16 and 18), and interconnection dummy barrier ribs extended from the main dummy barrier ribs (figure 15A, smaller inside dummy barrier ribs) toward the main barrier ribs with a curvature and connected to the main barrier ribs.

Regarding claims 13-14 and 24-25, Kawanishi discloses the dummy barrier ribs are arranged at non display regions sided with all of four sides of the display area, therefore the main dummy barrier ribs of the two opposite sides will be perpendicular to the address electrodes, while the other two opposite sides will be parallel to the address electrodes.

Regarding claims 15-16, Kawanishi discloses the main dummy barrier ribs are outlined with a plurality of arcs portions (figures 9A-18) serially connected to each other, and the arc portions are convex toward the outside of the substrates.

Regarding claim 17-18, Kawanishi discloses the arc portions have substantially the same curvature as the interconnection dummy barrier ribs (figure 15A shows that the main and the interconnection barrier ribs are semicircle), and the main and the interconnection barrier ribs are connected through the straight barrier ribs on the sides.

Regarding claims 19-20, Kawanishi discloses the dummy barrier ribs further comprise subsidiary dummy barrier ribs (figure 11A, inside part of the dummy barrier ribs that are overlapped by two main dummy barrier rib arcs) placed at the one sided region of the main dummy barrier ribs facing the main barrier ribs.

Regarding claim 22, Kawanishi discloses separation barrier ribs (figure 18, straight line dummy barrier rib that is not directly surrounding the display area 71) are provided between the main barrier ribs and the dummy barrier ribs (the arc shaped ribs around the barrier ribs).

Regarding claim 23, Kawanishi discloses separation barrier ribs proceed substantially parallel to the main dummy barrier ribs (figure 18, the straight lines or barrier ribs are all parallel in one direction).

***Allowable Subject Matter***

Claims 9 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 9, the prior art of record neither shows nor suggest a plasma display panel comprising, in part, the arc shaped outside wall which is outside of the display area has thickness which is thinner than the thickness of the barrier ribs that directly surrounds discharge cells, along with the rest of the limitations of the claim. Regarding claim 21, the prior art of record neither shows nor suggest a plasma display panel comprising, in part, the subsidiary dummy barrier ribs which is placed at the one sided region of the main dummy barrier ribs which is in the outside of the display area facing the main barrier ribs which is directly surrounding the

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discharge cells are arranged between two interconnection dummy barrier rib which is extended from main dummy barrier ribs toward the main barrier ribs with an arc and connected to main barrier ribs neighbors pair by pair, along with the rest of the limitations of the claim.

***Response to Arguments***

Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

***Contact information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bumsuk Won whose telephone number is 571-272-2713. The examiner can normally be reached on Monday through Friday, 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bumsuk Won  
Patent Examiner



**JOSEPH WILLIAMS**  
**PRIMARY EXAMINER**